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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/541,614	04/03/2000	Ristuo Kashiya	35.G2565	4869
5514	7590	04/25/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			YODER III, CHRISS S	
			ART UNIT	PAPER NUMBER
			2612	
DATE MAILED: 04/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/541,614

Applicant(s)

KASHIYAMA, RISTUO

Examiner

Chriss S. Yoder, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3, 5-7, 10-12, and 15-16 is rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama et al. (US Patent # 4,992,817).
2. In regard to claim 1, note Aoyama discloses a focusing-information detecting apparatus executing a focusing calculation according to an image signal sent from a sensor block formed of a plurality of cells (column 11, lines 1-5; and figure 18: 35), a control circuit for controlling an operation for accumulating image signal components in the sensor block (column 8, lines 15-32; and figure 18: 31, STR and END), a characteristic determination circuit for monitoring a P-B signal from a first set of cells in the sensor block after the accumulation operation controlled by said control circuit is finished (column 11, lines 10-18; and column 12, lines 45-50, V_d is considered to be the P-B signal), a reading processing circuit for performing an operation of applying signal

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reading processing to the plurality of cells in response to the monitoring result obtained by said characteristic determination circuit being a predetermined result (figure 23A: #108-#110, if P-B is greater than the threshold, then read the cells), and disabling signal reading processing to the plurality of cells in response to the monitoring result obtained by said characteristic determination circuit being another predetermined result (figure 23A: #108-#110, if P-B is less than the threshold, then disable the reading of the cells), and wherein every time the operation for accumulating image signal components in the sensor block is finished, the monitoring a P-B signal by said characteristic determination circuit and the operation executed by said reading processing circuit are performed (figure 23A; every time the accumulation is performed, the monitoring process and reading process are performed).

3. In regard to claim 3, note Aoyama discloses that the first set of the plurality of cell units output a luminance or contrast signal (column 8, lines 24-27).

4. In regard to claim 5, note Aoyama discloses a focusing-information detecting apparatus executing a focusing calculation according to an image signal sent from the plurality of sensor blocks (column 11, lines 1-5; and figure 18: 35), a reading circuit that reads the image signal after accumulation has finished (column 12, lines 45-57; the image signal is read to obtain V_{peak} and V_{bottom}), a reading control circuit that monitors the P-B signal of the image signal (column 12, lines 45-57; $V_{peak}-V_{bottom}$ is considered to be the P-B signal, and based on that signal the image read can be enabled or disabled) and also read the image signal from the sensor block whose P-B signal was subject to the monitoring, after the monitoring processing operation (figure

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23A: #110; and column 12, lines 45-57), a determination circuit for evaluating the P-B signal read in the monitoring processing operation for determining if the reading processing operation is to be executed (figure 23A: #108; if P-B is greater than V_{act} , the read process is executed), and a circuit for detecting focus or distance information according to the read image signal (figure 23A: #108 and figure 22: #2; if the read process executed based on the decision of #108, then the focus detection is performed in #2).

5. In regard to claim 6, note Aoyama discloses that the read process is disabled if the P-B signal indicates that the image is inappropriate for focus or distance information detection (figure 23A: #108-#110, if P-B is less than the threshold, then disable the reading of the cells).

6. In regard to claim 7, note Aoyama discloses a focusing-information detecting apparatus for focus calculation according to an image signal sent from a plurality of sensor blocks (column 11, lines 1-5; and figure 18: 35), a monitoring circuit for monitoring the P-B signal (column 11, lines 52-67; $V_{peak}-V_{bottom}$ is considered to be the P-B signal, and based on that signal the image read can be enabled or disabled), an output circuit for outputting the image signal (column 12, lines 50-56), a signal reading circuit for reading the image signal from the output circuits (column 12, lines 50-56), a reading control circuit for comparing the level of the P-B signal read by said monitoring circuit for a detection area with a determination level (figure 23A: #108; column 12, lines 45-57; $V_{peak}-V_{bottom}$ is considered to be the P-B signal, and based on that signal the image read can be enabled or disabled), and reading the image signal if the comparison

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results in one relationship, and disabling the read if the comparison results in a second relationship (figure 23A: #108-#110, if P-B is greater than the threshold, then read the cells, and if P-B is less than the threshold, then disable the reading of the cells), and a circuit for calculating focus or distance information (figure 23A: #108 and figure 22: #2; if the read process executed based on the decision of #108, then the focus detection is performed in #2).

7. In regard to claim 10, note Aoyama discloses reading the image once the focus or distance detection has succeeded (figure 23A: #108-111; if the focus or distance detection has succeeded).

8. In regard to claim 11, note Aoyama discloses that the P-B signal is the difference between the maximum and minimum values in the image signal (column 12, lines 45-48).

9. In regard to claim 12, note Aoyama discloses a focus or distance detection apparatus with a plurality of image accumulation sensor blocks (figure 18: 36 and 37 are considered sensor blocks), a focus detecting sensor (figure 18: 35 is considered the sensor), a difference output section for outputting the difference between the maximum and minimum of the image signal (figure 23A: #107 Vd is considered the difference signal), an image signal output section in each detection area (figure 16: IS1-IS7 output the image signal), a signal reading section that reads the difference output (figure 23A: #108 the difference output is read and compared to a threshold), a reading control circuit for reading the difference output for a focus or distance detection area and reading the image signal output if the difference signal is greater than a predetermined

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value and disabling reading of the image signal if the difference signal is smaller than a predetermined value (figure 23A: #108-111; if V_d is greater than V_{act} , the read process is executed, #110, and if $P-B$ is less than V_{act} , then the read is disabled, #111), and calculation circuit for calculating focus or distance detection information (figure 23A: #2 and figure 22: #2 calculates the focus detection information).

10. In regard to claim 15, note Aoyama discloses reading the image, if the difference is greater than the predetermined value, once the focus or distance detection has succeeded and (figure 23A: #108-111; if V_d is greater than V_{act} , the read process is executed, #110).

11. In regard to claim 16, note Aoyama discloses a focus or distance detection apparatus with a plurality of detection areas (figure 18: 36 and 37 are considered the detection areas), a focus detecting sensor (figure 18: 35), a maximum output section and minimum output section for outputting maximum and minimum of the image signal (figure 18: V_{peak} and V_{bottom}), an image signal output section that outputs the image signal in each detection area (column 12, lines 40-56), a signal reading section for reading a signal from the maximum, minimum, and image signal output section (column 12, lines 40-56), a reading control circuit for reading the maximum value and the minimum value and calculating the difference between the two (column 12, lines 40-56; and figure 23A:#108; V_d is the difference between the maximum and minimum values) and reading the image signal output if the difference signal is greater than a predetermined value and disabling reading of the image signal if the difference signal is smaller than a predetermined value (figure 23A: #108-111; if V_d is greater than V_{act} ,

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the read process is executed, #110, and if P-B is less than Vact, then the read is disabled, #111), and a calculation circuit for calculating focus or distance detection information (figure 22: #2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 8-9 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al. (US Patent # 4,992,817) in view of Toshinobu et al. (US Patent # 5,361,095).

13. In regard to claim 8, note Aoyama discloses a focusing-information detecting apparatus as claimed in claim 7, as well as the detection of weather focusing has succeeded (figure 22: #4). Therefore, it can be seen that the Aoyama device lacks a determination level changing circuit for determining weather focus or distance detection has succeeded, and if so, changing the determination level according to the level of a characteristic signal. Toshinobu discloses the use of a level changing circuit that stores one value in memory and compares the input with the stored value, and depending on the comparison, adjust the stored value according to the input value (column 3, lines 17-30; and column 12, lines 36-43). Toshinobu teaches that the level changing is preferred in order to provide a more accurate comparison value to increase focus quality (column 2, lines 49-56). Therefore, it would have obvious to one of ordinary skill in the art to

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modify the Aoyama device to include a level changing circuit as suggested by Toshinobu.

14. In regard to claim 9, note Aoyama discloses a focus or distance detection apparatus as claimed in claim 7, as well as the detection of weather focusing has succeeded (figure 22: #4). Therefore, it can be seen that the Aoyama device lacks a changing circuit for determining weather focus or distance detection has succeeded, and if so, changing the determination level dependent of whether it is in focus or not. Toshinobu discloses the use of a changing circuit that stores one value in memory and compares the input with the stored value, and depending on the comparison, adjust the stored value according to the input value using two different values (column 3, lines 17-30; and column 12, lines 36-43). Toshinobu teaches that the level changing is preferred in order to provide a more accurate comparison value to increase focus quality (column 2, lines 49-56). Therefore, it would have obvious to one of ordinary skill in the art to modify the Aoyama device to include a changing circuit to change the value depending on whether the focusing has succeeded as suggested by Toshinobu.

15. In regard to claim 13, note Aoyama discloses a focus or distance detection apparatus as claimed in claim 12, as well as the detection of weather focusing has succeeded (figure 22: #4). Therefore, it can be seen that the Aoyama device lacks a changing circuit for determining weather focus or distance detection has succeeded, and if so, changing the determination level according to the level of a characteristic signal. Toshinobu discloses the use of a changing circuit that stores one value in memory and compares the input with the stored value, and depending on the

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comparison, adjust the stored value according to the input value (column 3, lines 17-30; and column 12, lines 36-43). Toshinobu teaches that the level changing is preferred in order to provide a more accurate comparison value to increase focus quality (column 2, lines 49-56). Therefore, it would have obvious to one of ordinary skill in the art to modify the Aoyama device to include a changing circuit as suggested by Toshinobu.

16. In regard to claim 14, note Aoyama discloses a focus or distance detection apparatus as claimed in claim 12, and the detection of weather focusing has succeeded (figure 22: #4). Therefore, it can be seen that the Aoyama device lacks a changing circuit for determining weather focus or distance detection has succeeded, and if so, changing the determination level dependent of whether it is in focus or not. Toshinobu discloses the use of a changing circuit that stores one value in memory and compares the input with the stored value, and depending on the comparison, adjust the stored value according to the input value using two different values (column 3, lines 17-30; and column 12, lines 36-43). Toshinobu teaches that the level changing is preferred in order to provide a more accurate comparison value to increase focus quality (column 2, lines 49-56). Therefore, it would have obvious to one of ordinary skill in the art to modify the Aoyama device to include a changing circuit to change the value depending on whether the focusing has succeeded as suggested by Toshinobu.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (571) 272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CSY
April 12, 2005


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